

# **ENERGY STAR® Application for Certification**

**ENERGY STAR ®** Score<sup>1</sup>

### 40 Broad St.

Registry Name: 40 Broad St. Property Type: Office

Gross Floor Area (ft2): 309,915

**Built: 1923** 

For Year Ending: 07/31/2016<sup>2</sup>

**Date Application Becomes Ineligible: 11/28/2016** 

- 1. The ENERGY STAR Score is based on total source energy. A score of 75 is the minimum to be eligible for the ENERGY STAR.
- 2. Applications must be submitted to EPA within 120 days of the Year Ending Date. The award is not final until approval is received from EPA.



Please use the <u>Licensed Professional's Guide to the ENERGY STAR ® for Commercial</u> **Buildings** for reference in completing this checklist (http://www.energystar.gov/lpguide).

### **Property & Contact Information**

**Property Address** 40 Broad St. 40 Broad St.

Boston, Massachusetts 02109

**Property ID**: 1533004 **Boston Energy Reporting ID:** 

0303824000

**Property Owner** 40 Broad Street Owner, Inc. 40 Broad Street Boston, MA 02109

**Primary Contact** Sendy Marrero 40 BROAD ST **BOSTON, MA 02109** 617-799-8042 SMarrero@LPC.com

### 1. Review of Whole Property Characteristics

Basic Property Information	
<ol> <li>Property Name for Registry: 40 Broad St.</li> <li>Is this the official name to be displayed in the Registry of ENERGY STAR Certified Buildings and Plants?</li> </ol>	⊠ Yes ☐ No
If "No", please specify:  2) Property Type: Office  Is this an accurate description of the primary use of this property?	⋉ Yes ☐ No

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Generated On: 09/02/2016

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3) Location: 40 Broad St. Boston, Massachusetts 02109	⋉ Yes ☐ No
Is this correct and complete?	
4) Gross Floor Area: 309,915 ft² Does this represent the entire property? (i.e., no part of the building/property was excluded/subtracted from the total) If "no" please specify what space has been excluded.	Yes No
5) Average Occupancy: (b) (4)	√ Yoo □ No
Is this occupancy accurate for the entire 12 month period being assessed?	K Yes
6) Number of Buildings: 1	k Yes □ No
Does this number accurately represent all structures?	- 100 <u> </u>
Notes:	
Indoor Environmental Standards	
1) Ventilation for Acceptable Indoor Air Quality  Does this property meet the minimum ventilation rates according to ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality?	X Yes  No
2) Acceptable Thermal Environmental Conditions  Does this property meet acceptable thermal environmental conditions according to ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy?	⊠ Yes ☐ No
3) Adequate Illumination	
Does this property meet the minimum illumination levels as recommended by the Illuminating Engineering Society of North America (IESNA) Lighting Handbook?	▼ Yes  No
Notes:	

# 2. Review of Property Use Details

Office: Occupied Office		
This Use Detail is used to calculate the 1-100 ENERGY STAR Score.		
<b>★ 1) Gross Floor Area</b> : 302,534		
Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.	× Yes	□ No
<b>☆</b> 2) Weekly Operating Hours:		
Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.	X Yes	□ No
☆ 3) Number of Workers on Main Shift: (b) (4)		
Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.	Yes	□ No
★ 4) Number of Computers: (b) (4)		
Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.	X Yes	☐ No
<b>☆</b> 5) Percent That Can Be Heated: (b) (4)		
Is this the total percentage of the property that can be heated by mechanical equipment?	X Yes	☐ No
<b>☆</b> 6) Percent That Can Be Cooled: (b) (4)		
Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.	X Yes	☐ No

Notes:		
Office: (b) (4)		
This Use Detail is used to calculate the 1-100 ENERGY STAR Score.		
★ 1) Gross Floor Area: 1,822		
Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.	<b>⋉</b> Yes	□ No
★ 2) Weekly Operating Hours: (b)(4)		
Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.	X Yes	□ No
☆ 3) Number of Workers on Main Shift: (5) (4)		
Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.	<b>⋉</b> Yes	□ No
★ 4) Number of Computers: (5) (4)		
Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.	X Yes	☐ No
<b>☆</b> 5) Percent That Can Be Heated: (5) (4)		
Is this the total percentage of the property that can be heated by mechanical equipment?	X Yes	☐ No
★ 6) Percent That Can Be Cooled: [5] (4)		
<u>—</u>	<b>⋉</b> Yes	□ No

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Is this the total percentage of the property that can be cooled by mechanical equipment?	
This includes all types of cooling from central air to individual window units.	
N. A.	
Notes:	
Bootourent Bootourent	
Restaurant: Restaurant	
This Use Detail is used to calculate the 1-100 ENERGY STAR Score.	
This use detail is used to calculate the 1-100 ENERGY STAR Score.	
♦ 1) Cross Floor Area: F FF0	
<b>★ 1) Gross Floor Area</b> : 5,559	
Is this the total size, as measured between the principal exterior surfaces of the	K Yes □ No
enclosing fixed walls of the building(s)? This includes all areas inside the building(s)	
such as: occupied tenant areas, common areas, meeting areas, break rooms,	
restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross	
Floor Area should not include interstitial plenum space between floors, which may house	
pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes	
all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the	
base level only. Do not increase the size to accommodate open atrium space at higher	
levels. The Gross Floor Area should not include any exterior spaces such as balconies	
or exterior loading docks and driveways.	
,	

# 3. Review of Energy Consumption

#### Data Overview Site Energy Use Summary **National Median Comparison** Electric - Grid (kBtu) National Median Site EUI (kBtu/ft²) 98.3 District Steam (kBtu) National Median Source EUI (kBtu/ft²) 285.8 Total Energy (kBtu) 16,609,585.4 % Diff from National Median Source -45.5% **Energy Intensity** Site (kBtu/ft²) 53.6 Emissions (based on site energy use) Source (kBtu/ft²) 155.8 Greenhouse Gas Emissions (Metric 1,546.4 Tons CO2e) **Power Generation Plant or Distribution Utility:**

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Notes:

### NSTAR Co [Eversource Energy]

Note: All values are annualized to a 12-month period. Source Energy includes energy used in generation and transmission to enable an equitable assessment.

### **Summary of All Associated Meters**

The following meters are associated with the property, meaning that they are added together to get the total energy use for the

Meter Name	Fuel Type	Start Date	End Date	Associated With
Steam	District Steam	01/01/2006	In Use	40 Broad St.
Electric (b) (4)	Electric	03/30/2009	In Use	40 Broad St.
ELECTRIC (b) (4)	Electric	03/01/2009	In Use	40 Broad St.
Electric (b) (4)	Electric	03/01/2009	In Use	40 Broad St.
otal Energy Use		60.		Yes  □ No
	of this application?	he total energy use of this	property during the	
	bove include all fuel <i>types</i> enerator fuel oil have bee	s at the property? That is, n excluded.	no additional fuels such a	X Yes  No
n-Site Solar and	Wind Energy			K Yes
Are all on-site so must be reporte		reported in this list (if pre-	sent)? All on-site systems	
Notes:				

### **District Steam Meter: Steam (KLbs. (thousand pounds))** Associated With: 40 Broad St. **Start Date End Date** Usage 07/30/2015 09/01/2015 09/01/2015 09/30/2015

Start Date	End Date	Usage
09/30/2015	10/30/2015	(h) $(1)$
10/30/2015	12/01/2015	(D)
12/01/2015	12/31/2015	
12/31/2015	02/02/2016	
02/02/2016	03/02/2016	
03/02/2016	04/01/2016	
04/01/2016	05/03/2016	
05/03/2016	06/01/2016	
06/01/2016	06/30/2016	
06/30/2016	08/02/2016	
	Total Consumption (KLbs. (thousand pounds)):	
	Total Consumption (kBtu (thousand Btu)):	
otal Energy Consumptio		⊠ Yes □ No
through this meter that affec	als shown above include consumption of all energy tracked t energy calculations for the reporting period of this application e utility bills received by the property)?	on
Notes:		

Electric Meter: Electric	(b) (4) (kWh (thousar	nd Watt-hours))	
Associated With: 40 Broad	d St.		
Start Date	End Date	Usage	Green Power?
07/30/2015	08/30/2015	(b) (4)	No
08/30/2015	09/29/2015	(D)	No
09/29/2015	10/29/2015		No
10/29/2015	12/01/2015		No
12/01/2015	01/03/2016		No
01/03/2016	02/01/2016		No
02/01/2016	03/01/2016		No
03/01/2016	03/30/2016		No
03/30/2016	04/30/2016		No
04/30/2016	05/31/2016		No

Start Date	End Date	Usage	Green Power?
05/31/2016	06/29/2016	(b) (4)	No
06/29/2016	07/31/2016	( / ( /	No
	Total Consumptio Watt-hours)):	on (kWh (thousand	(b) (4)
	Total Consumption Btu)):	on (kBtu (thousand	
otal Energy Consumption	for this Meter s shown above include consum	otion of all energy tracked	X Yes No
through this meter that affect	energy calculations for the repo utility bills received by the propo	rting period of this application	
Notes:			

lectric Meter: ELECTI	RIC (b) (4) (kWh (thou	usand Watt-hours))	
Start Date	End Date	Usage	Green Power?
07/29/2015	08/27/2015	(h) (4)	No
08/27/2015	09/28/2015	$(\mathbf{D})$	No
09/28/2015	10/28/2015		No
10/28/2015	11/30/2015		No
11/30/2015	12/30/2015		No
12/30/2015	01/30/2016		No
01/31/2016	02/29/2016		No
02/29/2016	03/29/2016		No
03/29/2016	04/27/2016		No
04/27/2016	05/30/2016		No
05/30/2016	06/29/2016		No
06/29/2016	07/31/2016		No
	Total Consumpti Watt-hours)):	on (kWh (thousand	(b) (4)
	Total Consumpti Btu)):	on (kBtu (thousand	
otal Energy Consumptio	n for this Meter		X Yes  No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

ciated With: 40 Broad			
Start Date	End Date	Usage	Green Power?
07/30/2015	08/30/2015	(b) (4)	No
08/30/2015	09/29/2015		No
09/29/2015	10/29/2015		No
10/29/2015	12/01/2015		No
12/01/2015	01/03/2016		No
01/03/2016	02/01/2016		No
02/01/2016	03/01/2016		No
03/01/2016	03/30/2016		No
03/30/2016	04/30/2016		No
04/30/2016	05/31/2016		No
05/31/2016	06/29/2016		No
06/29/2016	07/31/2016		No
	Total Consumptio Watt-hours)):	on (kWh (thousand	(b) (4)
	Total Consumption Btu)):	on (kBtu (thousand	
Energy Consumptio	n for this Meter		⊠ Yes □ No

Notes:

## 4. Signature & Stamp of Verifying Licensed Professional

Steve Di Giacomo visited this site on August 10, 2016 (Date). Based on the conditions observed at the time of the visit to this property, I verify that the information contained within this application is accurate and in accordance with the Licensed Professional Guide.

Signature: Stephen in D. Diacoun Date: 9/6/2016

Licensed Professional License: 37749 in MA

STEPHEN DIGIACOMO 160 Beech Street Franklin, MA 02038 508-533-1128 Steve@EMA-Boston.com



**Professional Engineer Stamp** 

**NOTE:** When applying for the ENERGY STAR, the signature of the Verifying Professional must match the stamp.

# 5. Signatory Agreement

I hereby nominate the above described property for award of the ENERGY STAR. I have provided a copy of the Licensed Professionals Guide to the ENERGY STAR for Commercial Buildings to our Licensed Professional (LP) for reference. As documented by the above checklist, this property meets the conditions necessary to qualify as ENERGY STAR. I am submitting this application within four months of the Year Ending Date (July 31, 2016) used to generate the application. I will assist EPA, if requested, in verifying any data included in this application. Furthermore, I agree to associate the ENERGY STAR logo only with this property and to adhere to the ENERGY STAR Identity Guidelines.

Signature (must be a direct employee of the building owner/manager):

Signatory Name: Sendy Marrero

Property Owner: 40 Broad Street Owner, Inc.

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The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460